

# t54\_sf\_mastr (TMNwGPHRJxetb- mZis18ADFBmf9NSbhhW1RF)

October 27, 2020

Let  $v1\_ami\_2 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k1\_scmf\_sa\_2 : \iota$  be given. Let  $m1\_scmf\_sa\_2 : \iota \Rightarrow o$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v4\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. Let  $v5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_compos\_1 : \iota \Rightarrow \iota$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_finset\_1 : \iota \Rightarrow o$  be given. Let  $k16\_scmf\_sa\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k17\_scmf\_sa\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k5\_sf\_mastr : \iota \Rightarrow \iota$  be given. Let  $k2\_sf\_mastr : \iota \Rightarrow \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Let  $k1\_sf\_mastr : \iota \Rightarrow \iota$  be given. Let  $k4\_scmf\_sa\_m : \iota \Rightarrow \iota$  be given. Let  $k4\_ordinal1 : \iota$  be given. Assume the following.

$$\begin{aligned} \forall X0.((v1\_relat\_1 X0) \wedge ((v4\_relat\_1 X0 k5\_numbers) \wedge ((v5\_relat\_1 \\ X0 (u1\_compos\_1 k1\_scmf\_sa\_2)) \wedge ((v1\_funct\_1 X0) \wedge (v1\_finset\_1 \\ X0)))))) \Rightarrow (\neg k5\_sf\_mastr X0 \in k2\_sf\_mastr X0) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (r1\_tarski (k1\_tarski X0) X1) \Leftrightarrow (X0 \in X1) \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0. (m1\_subset\_1 X0 (u1\_compos\_1 k1\_scmf\_sa\_2)) \Rightarrow (\forall X1. \\ ((v1\_relat\_1 X1) \wedge ((v4\_relat\_1 X1 k5\_numbers) \wedge ((v5\_relat\_1 X1 \\ (u1\_compos\_1 k1\_scmf\_sa\_2)) \wedge ((v1\_funct\_1 X1) \wedge (v1\_finset\_1 X1)))))) \Rightarrow \\ ((X0 \in k2\_relset\_1 (u1\_compos\_1 k1\_scmf\_sa\_2) X1) \Rightarrow (r1\_tarski ( \\ k1\_sf\_mastr X0) (k2\_sf\_mastr X1)))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0. ((v1\_ami\_2 X0) \wedge (m1\_subset\_1 X0 (u1\_struct\_0 k1\_scmf\_sa\_2))) \Rightarrow \\ (\forall X1. (m1\_scmf\_sa\_2 X1) \Rightarrow (\forall X2. (m1\_subset\_1 X2 (u1\_compos\_1 \\ k1\_scmf\_sa\_2)) \Rightarrow (((X2 = k16\_scmf\_sa\_2 X0 X1) \vee (X2 = k17\_scmf\_sa\_2 X0 \\ X1)) \Rightarrow (k1\_sf\_mastr X2 = k4\_scmf\_sa\_m X0)))) \end{aligned} \quad (4)$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \quad (5)$$

Assume the following.

$$\forall X0.((v1\_ami\_2 X0) \wedge (m1\_subset\_1 X0 (u1\_struct\_0 k1\_scmf\_sa\_2))) \Rightarrow (k4\_scmf\_sa\_m X0 = k1\_tarski X0) \quad (6)$$

Assume the following.

$$\forall X0. \forall X1. (((v1\_ami\_2 X0) \wedge (m1\_subset\_1 X0 (u1\_struct\_0 k1\_scmf\_sa\_2))) \wedge (m1\_scmf\_sa\_2 X1)) \Rightarrow (m1\_subset\_1 (k17\_scmf\_sa\_2 X0 X1) (u1\_compos\_1 k1\_scmf\_sa\_2)) \quad (7)$$

Assume the following.

$$\forall X0. \forall X1. (((v1\_ami\_2 X0) \wedge (m1\_subset\_1 X0 (u1\_struct\_0 k1\_scmf\_sa\_2))) \wedge (m1\_scmf\_sa\_2 X1)) \Rightarrow (m1\_subset\_1 (k16\_scmf\_sa\_2 X0 X1) (u1\_compos\_1 k1\_scmf\_sa\_2)) \quad (8)$$

**Theorem 1**

$$\begin{aligned} & \forall X0. ((v1\_ami\_2 X0) \wedge (m1\_subset\_1 X0 (u1\_struct\_0 k1\_scmf\_sa\_2))) \Rightarrow \\ & \quad (\forall X1. (m1\_scmf\_sa\_2 X1) \Rightarrow (\forall X2. ((v1\_relat\_1 X2) \wedge \\ & (v4\_relat\_1 X2 k5\_numbers) \wedge ((v5\_relat\_1 X2 (u1\_compos\_1 k1\_scmf\_sa\_2)) \wedge \\ & ((v1\_funct\_1 X2) \wedge (v1\_finset\_1 X2)))))) \Rightarrow (\neg((k16\_scmf\_sa\_2 X0 X1 \in \\ & k2\_relset\_1 (u1\_compos\_1 k1\_scmf\_sa\_2) X2) \vee (k17\_scmf\_sa\_2 X0 X1 \in \\ & k2\_relset\_1 (u1\_compos\_1 k1\_scmf\_sa\_2) X2)) \wedge (k5\_sf\_mastr X2 = X0)))) \end{aligned}$$